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ABSTRACT

Results and descriptions of an exploratory study designed to develop an instrument to identify gifted Mexican-American children who would not ordinarily be identified with traditional techniques are presented. The Mexican American community was used to develop a cultural-community based definition of giftedness and to develop a measure for identifying Mexican American gifted children using behavior statements. These behaviors were then used to produce an adjectival rating scale and a behavior rating scale which were administered to the parents of the fifty four bilingual children in the sample. These children were administered five diverse tests of intellectual ability. Thirty four children across grade levels were selected into the gifted category on at least one of the five tests. Nine children were selected into the gifted category on more than one instrument. Of these thirty four gifted children, twenty two were among those for whom behavior and adjectival ratings had been collected. From the data it appeared that gifted children were seen as having a better sense of humor, greater intelligence, more self-confidence, as being more creative, more ambitious, more truthful, more independent, more curious, as having better judgment and being more expressive than non-gifted children. (RC)

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Gifted Mexican American Children: An Ethnico-Scientific Perspective

by

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INTRODUCTION

In the past few years much programmatic emphasis has been placed on meeting the educational needs of the financially and educationally disadvantaged student and the student from a culturally or linguistically different background. These programs must be maintained; indeed even more energies need to be invested in them. But in providing educational programs and related services for these children, we have too frequently overlooked the special needs of the gifted and talented child. Despite popular opinion to the contrary, intellectual and creative talent cannot survive educational neglect and apathy (Gallagher, in press). It is time for us to realize that it is in our best interest to assure not only the development of children who have the potential to make extraordinary contributions to our society in general but also to the emergence of our non-dominant ethnic groups.

Exceptionally talented individuals come from all races, socioeconomic groups, geographic areas, and environments. A conservative estimate of the gifted population ranges between 1.5 and 2.5 million children out of the total school population of 51.6 million (1970 estimate). In Education of the Gifted and Talented (1972), the U. S. Office of Education acknowledges "a widespread neglect of gifted and talented children." This neglect is even more intense among the minority groups, particularly with Mexican American children and the children of other Spanish-speaking groups, whose giftedness may be unnoticed and unnurtured in schools lacking the capability even to identify the gifted among them. Three of the major findings of the U. S. Office of Education study serve to reiterate these facts:

- Existing services to the gifted and talented do not reach large and significant subpopulations (e.g., minorities and disadvantaged) and serve only a very small percentage of the gifted and talented population generally.

- Special services designed for the gifted and talented disadvantaged will also serve other target populations singled out for attention and support.

- Services provided to gifted and talented children can and do produce significant and measurable outcomes.

The gifted and talented among the Mexican American minority group pose a particular challenge and opportunity for educators. The fact that some unusually gifted Mexican Americans have emerged and demonstrated outstanding ability does not diminish the need for educational planners and researchers to attend to the special problems of their early identification and nurture within the schools. For each gifted Mexican American who has overcome the obstacles and discouragement posed by educational neglect and has demonstrated his or her ability, how many other bright Mexican Americans have been frustrated by the lack of opportunity for development and have given up or expressed themselves in socially unacceptable ways? (See Dodd, 1964)

To discover and develop the potential of the gifted youngsters in the minority groups necessitates comprehensive planning. Evidence from various studies and reviews (e.g., Bruch, 1972; De Hann & Havighurst, 1961; Freehill, 1961; Stallings, 1972) suggests that the more specific and carefully planned the intervention, and the earlier the intervention, the better the results. Unfortunately, extant measures of giftedness are not particularly reliable or valid indices when used on young children (Blosser, 1963). Attempts to utilize tests at the preschool level have been successful only when careful preliminary screening and search have been conducted (Baldwin, 1964; Martinson, 1960; & Walton, 1961).

The problem of developing talent continues to be one of devising educational opportunities that will unlock this creative and intellectual potential,

programs that will be concerned with values, attitudes, self-concepts, and commitment to continued growth, not just the acquisition of knowledge.

> A more humanistic education, where the affective is integrated with the cognitive has special meaning for our gifted youngsters--as it does for all youngsters. We need to allow the development of a gifted child's capacity for love, empathy, awareness and his ability to communicate as a human being with his fellow human beings. (Lyon, 1972).

While we are trying to bring together the cognitive and affective in a total educational approach for all children, we must remember that before programs for the gifted minority group children can be designed, the gifted among them need to be identified and their special needs studied. At the time of school entry and continuing throughout their school career the gifted and talented present challenging educational problems because of their unusual intellectual abilities.

Minority children who are gifted need to be recognized for a number of reasons:*

1. They are more difficult to identify than members of the dominant ethnic group because tests and measures used to identify dominant group students are not valid cross-culturally.

2. A greater number of minority group gifted students are alienated by their educational experiences in a non-responsive educational system than are gifted students of the dominant ethnic group. This is manifest in the high drop-out rates of the minority group.

3. Intervention strategies in general and educational programs in particular require a more comprehensive sensitizing of instructional personnel to deal not only with the high potentials of these youngsters but also with the different style of life through which they exhibit these propensities.

*Three members of the project staff presented these needs at the 1973 Northwest Regional Conference on the Gifted and Talented in New Haven, Connecticut.

For example, we need to develop methodologies for bilingual-bicultural education. The natural strength of the dominant language of minority group members--be it language difference from English or a dialectical variation of English--must be capitalized upon in the instruction of the child. Furthermore, the mother tongue must be given status in the school program as a means of expressing itself worthy of retention and elaboration, in order to preserve a child's ethnic identification while providing him linguistic alternatives with which to cope with the dominant society.

4. If programs for the gifted members of non-dominant ethnic groups are to avoid the criticisms leveled against many compensatory programs, they must provide for the leadership of ethnically-targeted projects by members of the ethnic groups themselves.

   We submit that the identification and cultivation of the most gifted and talented members of the diverse ethnic groups would greatly facilitate the self-management of ethnic destiny.

   The visibility of minority leadership would greatly enhance the culture as a whole and the self-concept of the individual child.

The gifted child is especially alert to the irrelevancy of his schooling and may become even more frustrated than the average child. In an unresponsive system, what special efforts can we expect for the education of the gifted? We need an ethnically compatible educational system which will provide for individual differences in children, one that will do the following:

1. Develop early identification techniques.

2. Individualize instruction in a manner relevant ethnically to ethnically compatible school systems.

3. Promote cultural and linguistic pluralism through the deliberate cultivation of the best young minds in the community, so that children in contact across cultures can benefit from the strengths in the other cultures.

4. Develop and implement a system of inservice for teachers, counselors, administrators and paraprofessionals which will make them sensitive and responsive to the needs of youngsters and enable them to use and adapt relevant curriculum.

5. Recruit, train and retain minority group members in positions of power in education and other fields of creative endeavor.

In The Gifted Child in the Elementary School, James J. Gallagher (1959) discusses the usefulness and limitations of the various procedures for identifying gifted children, none of them flawless. Using only teacher observation we would miss underachievers, the culturally different, children with motivitational problems, children with emotional problems, and children with a belligerent or apathetic attitude toward the school programs. Also, in the U. S. Office of Education study, it was discovered that teachers do not identify about 50 percent of the gifted, and tend to include other students within the gifted category merely because they are well-dressed, polite and obedient. Barbe (1964) found that teachers do not nominate 25 percent of the highly gifted. Similar levels of inaccuracy appear to occur when attempts were made to select the creative child (Martinson & Seagoe, 1967). Informal methods of nomination definitely need supplementing with standardized tests of intelligence and achievement or with other, valid assessment techniques.

According to Gallagher (1959), individual intelligence tests are the best method, but expensive in the use of professional time and services. It is not practical as a general screening tool in schools with limited psychological services. Of late, much criticism has been raised concerning the use of intelligence tests, based on middle-class knowledge and values, with minority group children (DeAvila, 1972).

Gallagher (1959) considers group intelligence tests to be generally good for screening, but these measures may not identify those potentially gifted students with reading difficulties, emotional or motivational problems, or what he calls cultural impoverishment. Education of the Gifted and Talented (U. S. Office of Education, 1972) reports that the more highly gifted are actually penalized by group intelligence tests. Achievement test batteries will not identify the underachieving child who is nonetheless exceptionally

bright. Achievement tests are typically constructed to measure breadth of knowledge--not depth of understanding, not comprehensive knowledge, nor knowledge transferable across situations. Creativity tests, Gallagher feels, do show promise of identifying the divergent thinker who may be overlooked on the intelligence tests, but may be too narrow in scope to be used without being supplemented by other measures.

The tests presently used to identify gifted and talented youngsters are biased in favor of the population for which they were devised (Bernal, 1971, 1972a). It would seem, furthermore, that the greater the loading of these tests on g, general intelligence, the greater the likelihood of bias against non-dominant ethnic groups (Kleinfeld, 1973). They tend to measure the extent to which an individual's background is similar to that of the model cultural configuration of American society. Rarely has a test of intellectual potential been written for and standardized on a group of minority children. Test publishers and psychometrists have failed to fully consider the cultural and linguistic differences of minority group children when constructing, publishing, and administering these tests or interpreting their results.

An analysis of the content and format of items used in many of the traditional I.Q. tests suggests that many of these tests are measuring something other than that for which they were designed--at least when applied to children who are not of the same cultural background. For these persons, the tests are also measures of socialization and language (Zirkel, 1972), productivity or level of aspiration, experience or specific learning, and endurance. Psychometricians fail to take into consideration some of the differences between middle class Anglos and most minority groups: (1) minority group children as a rule do not speak or understand the language of the test; (2) they have not had the opportunities to acquire the knowledge (experience

of specific learning) necessary to pass the tests; (3) their experiences have not predisposed them to testing situations and have not developed test-taking strategies; and (4) they have a different cultural background, but are penalized by the socialization aspects of the I.Q. tests for not having acculturated (Mercer, 1971; Bernal, 1972a; DeAvila, 1972).

Not only are many of the identification measures methodologically controversial and controvertible, but (as will be seen in a subsequent chapter of this paper) the experts even have difficulty agreeing on a test-based definition of giftedness. This lack of a concise consensual definition (ORI, 1971) has often been a stumbling block to research on giftedness. The leaders in the field, however, are becoming increasingly aware that identification procedures that screen or bar participation of minority students in programs for the gifted have to be reconsidered (Gallagher, in press). Rather, the procedure should stress a search for talent. The question should not be whether minority students obtain a certain high score on tests of intelligence or achievement or creativity, which are appropriate with Anglo populations, but whether there are indications--perhaps taken from real life and reflecting the marks of intelligence fostered by their respective ethnic communities--of their true potential for cognitive development and the acquisition of functional bicultural skills. If talent potential is to be identified, better strategies must be found for accommodating test related linguistic and cultural differences between ethnic groups in general and their differential readiness to take tests (Bernal, 1971) and exposure to test content in particular. Also, professionals are beginning to understand that "intelligence" can be defined differently from culture to culture (e.g., Kleinfeld, 1972)--a matter of great moment to Mexican Americans who must live in two cultural settings.

Passow (1972) wrote that

> Giftedness and talent always have a social referent--those abilities that are identified and developed are those that are valued by society--and the child in the depressed area who is potentially gifted may be doubly disadvantaged for he lives in an environment that may be hostile or apathetic to his particular abilities. (p. 28)

Undoubtedly, a cross-cultural study of giftedness would serve to clarify the concept, much as other cross-cultural studies shed light on other traits or attributes (Manaster & Havighurst, 1972).

Knowing that there is no generally agreed upon definition of giftedness, that the present methods of identification are inadequate, in some respect, for all gifted children but especially for the minority gifted, and that giftedness as a construct or idea must always have some referents--i.e., is defined in a social context (Vernon, 1969)--the Bilingual Early Elementary Program of SEDL proposed to approach the study of giftedness as perceived by Mexican Americans themselves. The necessity of involving the Mexican American community--parents, community leaders, students, and children--is evident when we recall Passow's statement "...those abilities that are identified and developed are those that are valued by society." Studies done by psychologists, sociologists, anthropologists and historians have shown that Mexican Americans have some unique social and cultural values (e.g., Ramirez, 1972; Romano, 1969). It follows that Mexican Americans would also have some distinct behaviors which are valued by the Mexican American community and therefore selectively reinforced and developed.

An interview format was developed to elicit people's perceptions about gifted and talented children as well as examples of behaviors which would, in their eyes, be indicative of the trait. The interview and responses are

discussed later in the report. A review of the interview responses led to the development of a behavioral check list, which became the basis for the study described herein.

Although this report presents the result of an exploratory study--a first attempt to develop an instrument to identify gifted Mexican Americans who would not ordinarily be identified with traditional techniques--this research is a significant and encouraging step toward better identification methods and, ultimately, toward the design of culturally responsive programs for the gifted child of divergent background. Whereas other studies have indicated that certain behavioral/personality traits are associated with potential giftedness, this research shows that some of these traits are indeed diagnostic (or differentially predictive) of this potentiality, much as Meeker (1971) believed they would be.

Cross-cultural literature survey. A cross cultural search of the literature as it related to the gifted child was undertaken. A number of different sources were tapped: journals, books, abstracts, the ERIC (Educational Resources Information Center) system, and works not yet published. The search of the literature from the Spanish-speaking countries, pertaining to giftedness, the development of mental tests, and the development of a culturally based definition of giftedness was conducted at the Latin American Collection of the University of Texas at Austin.

Two facts became very clear as a result of the literature survey. First, the Spanish-speaking countries have not developed a culturally based definition of giftedness, nor have they developed their own mental tests. Rather, they are using translations or adaptations of verbal or non-verbal tests of intelligence and creativity developed in the United States. (These include the Prueba de Inteligencia de Wechsler, the Goodenough Draw-A-Man, the Stanford-Binet, and the Torrance Tests of Creative Thinking.)

Secondly, the majority of the literature on giftedness in the United States is based on psychologists' or educators' ideas of giftdness, which are still tied to a score on an intelligence test. Furthermore, no works were found which attempt to discover what the popular ideas of giftedness or talent are in the United States or to document the value of these traits in American society. After extensive discussion, the project staff concluded that the manifestations of giftedness in these definitions would be largely limited to fields requiring high verbal or scientific abilities, scholarship in particular. Likewise, talent would most likely be seen in traditional art forms or compositions. There is, then, the possibility that the larger

American society--including the dominant Anglo ethnic group--would view and attribute these qualities somewhat differently than educators or psychologists do, perhaps by extending the domains of giftedness and talent.

Community input. This project was postulated on the belief that a community, in this case, the Mexican Americans of Texas, can speak to the matter of intelligence. We affirm the necessity and validity of involving the community in a behavioral study. Chicanos do recognize and articulate many traits, attributes, characteristics, and capabilities of the truly outstanding thinker and performer. In an interview situation they are able to describe particular behaviors which are culturally valuable and, therefore, useful in distinguishing the gifted and talented child from the average.

Project field specialists worked with Mexican American barrio communities in three Texas cities to determine how giftedness and talent are perceived. An interview questionnaire in English (Appendix A) and Spanish (Appendix B) was developed by the project staff to gather data on such factors as the personal characteristics of gifted or talented children; how giftedness is revealed in the school, home, and community; the relationship of giftedness to bilingualism; and what kind of environment or background best allows giftedness in a child to flourish.

The interviewer introduced himself and gave a short statement of the purpose of the interview. "...I'm working on a study of the Mexican American culture with the Southwest Lab about talented and gifted children. We all know that everybody is different from everybody else in some ways. We are especially interested in the very talented and very gifted Mexican American child."

The interview format presented two sets of similar questions, the first set directed to the talented and the second to the gifted. Before the actual

questioning began, a story of a talented or gifted child was told, and some examples were given of talented or gifted people in our culture. By using the story and examples, we hoped to focus the respondents' attention on talent or giftedness while biasing their responses as little as possible.

The questions were designed to elicit a variety of responses. The first few questions were to elicit traits and characteristics useful in defining talent or giftedness in Mexican Americans. The next set of questions was to elicit behavioral statements useful in designing the behavior checklist.

The next two questions were intended to educe an image of a talented child. "Do you think of this child as being male or female, Mexican American or Anglo? If Mexican American: does (he/she) have light or dark skin?" Although some people were offended by this question, it was intended to discover if Mexican Americans associate giftedness with looking like an Anglo or a Spaniard (having light skin).

Question six was also misinterpreted by a few people. By asking, "In what areas do you think Mexican Americans are especially talented?" the staff wanted to assess in which areas Mexican Americans felt other Mexican Americans were especially talented and which areas were valued enough to be mentioned.

Question seven required that the interviewee think of persons in her/his acquaintance. Names given of children, five to eight years old, were recorded. Some of these children were visited at school or at home at a later date.

Three hundred interviews were conducted during a three-month period in the barrios of San Antonio, Austin, and Dallas. Of the respondents interviewed, 12.7% had little or no schooling. In the Southwest as a whole, 17.6% of the Mexican American population have little or no schooling. Thirty-seven percent (37%) of the interviewees had completed primary but had not completed high school, compared to the Southwest as a whole, where

46.42% have acquired the same level of schooling. Forty-two percent (42%) of the respondents had completed high school and some college, while only 35 percent of the Mexican Americans in the Southwest have. This higher than average educational level probably reflects the fact that most of the interviews were conducted in university towns (Austin and San Antonio) by university students. Six percent (6%) of the interviewees had either completed college, were in graduate school, or were professionals. This percentage is reflective of the Southwest as a whole (4.8%).

The interviews were read and tabulated by the project staff. This was done by hand, since the staff agreed that to tabulate with the computer would have required categories of responses which might not have been valid. As staff members worked with the data, categories of responses emerged naturally. Contradictory statements also were sorted by category, and if as many as 25 percent of the statements in any category were confounded, it was removed as a possible descriptor. The remaining categories were used in two ways. The first was to develop a limited cultural definition (see Community Perspectives) of giftedness in Mexican American children, fully realizing that this was a first attempt at exploring community points of view and that a definition will emerge as further research--principally in other geographic areas--is conducted. The items in these categories became the raw material for the development of the behavioral and adjectival checklists. The interview was structured to elicit statements of behaviors or actions which were thought to differentiate between average and gifted children.

Developing the behaviors rating scale and adjective rating scale. One hundred and twenty-six (126) of these behavioral statements were put on cards for ease in sorting. Twenty (20) Mexican Americans, 15 of which were

professionals, were asked to sort the statements into seven groups: Gifted, Talented, Average, Gifted and Talented, Talented and Average, Gifted and Average, and Irrelevant/Undecided. The judges then ranked the statements within each of the categories (except for the categories of Average and Irrelevant) according to their probable ability to discriminate among Gifted, Talented, and Average children. The behaviors were then tabulated according to their frequency in each category and by their mean rank within categories. These tabulations were inspected visually, and items which appeared in about equal frequency across the categories were eliminated, as were those which were consistently low in rank or found in the Irrelevant/Undecided Category over 25 percent of the time. Based on the results of this sorting procedure, the number of basic behavioral statements was reduced to 43.

These behavior statements were then cast into scale form. The lead-in question is, "How frequently does (name of S) do (the particular behavior)?" or "How frequently do (these behaviors) happen with/to (name of S)?"

The adjectival rating scale was developed from the categories by extracting the single word descriptors most often used. Polar adjectives were used at the other end of a seven point scale.

Both the behavioral and the adjectival items were revised according to the suggestions of the independent judges before they were written into the rating form administered to the parents of the children in the sample. The behavioral statements and the adjective check list constituted the basic interview for parents.

The sample. Bloom (1964) and Martinson (1961) have shown that early identification of gifted children is best for the child, since it permits the schools to nurture these children's gifts from the outset of their

educational experiences. For this reason the sample population was limited to bilingual Mexican American children in grades K-3, roughly five to eight years old.

In the interest of time and in the hope of generating a greater proportion of gifted youngsters for the purpose of this exploratory study than would normally be found in any population, the project staff decided to rely on the assistance of the staff and facilities of the Creative Learning Center in the Dallas area and on the Teacher Corps volunteers in the Edgewood Independent School District, San Antonio, for nominations. The Creative Learning Center gathers together some of the brightest, most creative minority group (Mexican American, Black, American Indian) and Anglo children in Dallas. The Teacher Corps volunteers were in the classroom four mornings a week. They were also involved in the community, made home visits, and set up clinics for such things as filing Income Tax Returns.

The Teacher Corps volunteers who worked with the project staff underwent two brief training sessions, one to dispel stereotypes about giftedness and the other on how to conduct the interviews themselves. The volunteers were working at Loma Park Elementary (income ranging from very poor to lower middle class) and Guerra Elementary (mostly migrant). They were asked to turn in six names of students in their respective classrooms, two gifted, two average, and two below average. They were also asked to try to obtain spontaneous validation of their nominations from the neighbors and parents of the children themselves on the interview forms.

A total of 108 bilingual children were nominated and tested. Although some children were nominated from Austin, test conditions proved to be

unfavorable. Each child was administered the WISC, Torrance-Thinking Creatively with Words, Verbal and Figural (Form A) and the DeAvila Cartoon Conservation Scales. All tests were administered within a three-month period. The field specialists contacted the parents of the sample group and administered the behavior scale and adjective scale. The field specialists conducted these sessions in the homes. Often it was impossible to find the parents at home or able to devote their full attention to responding. Therefore, of the 108 Mexican American children tested, 54 were actually rated by their parents, yielding a usable sample of the same number. There were 35 males and 19 females in the sample.

The test instruments. The Cartoon Conservation Scales (CCS) were developed based on the theory that the determination of intelligence must be studied through the examination of intra-individual rather than inter-individual approaches. Several measures of Piaget's conservation tasks were assessed by this cartoon format developed by DeAvila, et al. In DeAvila's (1972) procedure, three cartoon frames were presented in which two children discuss a Piagetian task. In the first frame an equality is established between two objects according to the dimension being studied (i.e., number, length, substance, etc.). In the second frame an identity transformation is depicted, and in the third frame the question of conservation of equivalence is asked. On the right side of the panel three possible answers are presented. The correct and the two distractor choices, which show the characters responding to the question, are randomly ordered in order to avoid position effects. In its current form the CCS consists of 30 cartoon panels. There were six items for each of the five tasks: conservation of number, substance, length, weight, and ege. While Piagetian development has not been used in the past as a measure of giftedness, the psychometric advantage of using the CCS, a test standardized on Chicano populations, and the possibility of considering

advanced cognitive sophistication as a mark of giftedness warranted its use.

The Torrance Tests of Creative Thinking consists of two batteries, Verbal Form A (or B) and Figural A (or B). Form A in Spanish and English was used in this study. The Verbal Tests consist of seven parallel tasks. Each task is believed to bring into play somewhat different mental processes, yet each requires the subject to think in divergent directions. The activities involve asking questions about a drawing, making guesses about the causes of the pictured event, making guesses about the possible consequences of the event, producing ideas for improving a toy so that it will be more fun for children to play with, thinking of unusual uses of cardboard boxes, asking provocative questions, and thinking of the varied possible ramifications of an improbable event. The Figural Tests include three activities. The first task, Picture Construction, is designed to stimulate originality and elaboration. The two succeeding tasks, Incomplete Figures and Repeated Figures, increasingly elicit greater variability in fluency, flexibility, originality, and elaboration (Torrance, 1966). Very importantly, the Torrance Tests of Creative Thinking permit minority children to respond "correctly" in terms of their own experiences (Torrance, 1972), since diverse (and divergent) expression is the essence of each test.

The theory underlying the Wechsler Intelligence Scale for Children (WISC) is that intelligence is an integral facet of personality and the two cannot be separated. In constructing this measure a deliberate attempt was made to take into account some of the other factors which contribute to the intelligence of an individual. The WISC consists of twelve subtests in two major groupings, as follows--Verbal: Information, Comprehension, Arithmetic, Similarities, Vocabulary, and Digit Span; Performance: Picture Completion, Picture Arrangements, Block Design,

Object Assembly, Coding and Mazes. In this study, eight of the twelve tests were used (the first and last tests of the verbal and performance groups were not administered), and the verbal and performance I.Q.s were prorated from these scores. When necessary, the instructions for each subtest were given in Spanish.

The WISC was originally standardized on a sample of 2,200 boys and girls. There were 100 boys and 100 girls in each of the age groups, from five through fifteen years. Only Anglo children were used to standardize the WISC (Wechsler, 1949).

Selection of gifted group after data gathered. In selecting the initial sample for testing, the Teacher Corps Volunteers' nominations were relied upon. But test data were the basis upon which gifted and non-gifted groups were selected. The project staff and representatives of the Evaluation staff of SEDL met to decide what criterion should be used for selection of the gifted sample.

The test instruments used in this study--the WISC (1) Verbal and (2) Performance, the Torrance Test of Creative Thinking (3) Verbal and (4) Figural, and DeAvila's (5) Cartoon Conservation Scales are somewhat diverse measures of intellectual ability. In order to use these measures it was necessary to obtain cut-off points for the gifted group. Four raters independently established giftedness cut-off scores for each of these five measures for each grade level, kindergarten through third. Any child whose score was at or above one of the five cut-off scores was placed in the gifted group.

Each rater's cut-off scores are listed in Table 1 by test instrument and by grade level. Table 2 contains the number of gifted children each rater identified (by test instrument, by grade level) with his/her

TABLE 1

GIFTED CHILD CUTOFF SCORES ESTABLISHED BY JURY RATERS ON FIVE TEST INSTRUMENTS

	DE AVILA				WISC VERBAL				WISC PERFORMANCE				TORRANCE VERBAL				TORRANCE FIGURAL			
GRADE	M*	J	EL	ER	M	J	EL	ER	M	J	EL	ER	M	J	EL	ER	M	J	EL	ER
K	13	23	23	23	101	116	101	129	111	120	127	127	37	72	64	72	164	226	207	33
First	14	21	21	21	95	116	100	125	107	118	111	125	34	69	69	69	173	233	202	29
Second	13	20	20	20	94	113	113	123	99	118	118	128	28	75	75	75	220	230	207	29
Third	19	22	22	22	101	118	118	123	111	125	125	125	44	72	62	62	250	227	250	42

*Initials of Jury Raters.

TABLE 2

NUMBER OF GIFTED CHILDREN IDENTIFIED BY JURY RATERS ON FIVE TEST INSTRUMENTS

	DE AVILA				WISC VERBAL				WISC PERFORMANCE				TORRANCE VERBAL				TORRANCE FIGURAL			
GRADE	M*	J	EL	ER	M	J	EL	ER	M	J	EL	ER	M	J	EL	ER	M	J	EL	ER
K	11	2	2	2	5	2	5	1	8	6	3	3	7	2	4	2	8	4	5	1
First	6	1	1	1	9	1	6	0	9	1	3	0	10	1	1	1	11	6	8	0
Second	6	1	1	1	4	2	2	1	7	2	2	1	7	1	1	1	5	3	6	0
Third	8	7	7	7	11	4	4	2	7	4	4	4	7	1	3	3	8	9	8	7

*Initials of Jury Raters.

respective cut-off scores. Table 3 presents the number of gifted children identified by each rater (collapsed across test and grade level) and the median number of gifted children identified by the four raters.

Correlations between each rater's ratings and the corresponding group median ratings are found in Table 4. These correlations provide measures of rater reliability by establishing the extent to which each rater agreed with the group median ratings. Three (J, EL, ER) of the four correlations were within an acceptable significance level while the fourth was not; consequently, the ratings of the fourth rater (M), which were not sufficiently in agreement with those of the other three raters, were dropped for purposes of obtaining a mean group rating.

Table 5 contains the rounded mean number of gifted children identified, listed by test instrument and by grade levels, computed on the basis of the three raters (J, EL, ER). The number of different children identified as gifted on at least one of the five test intruments were presented by grade level and by rater in Table 6.

Thirty-four (34) children across grade levels were selected into the gifted category on at least one of the five test instruments. Nine of these children were selected into the gifted category on more than one instrument. Of these 34 gifted children, 22 were among those for whom behavioral and adjectival ratings had been collected. Ratings were collected for a total of 54 children, the remaining 32 children fell into the normal group. The gifted sample had 17 males and 5 females; the normal sample had 18 males and 14 females.

TABLE 3

NUMBER OF GIFTED CHILDREN IDENTIFIED BY EACH JURY RATER AND MEDIAN JURY RATING (COLLAPSED ACROSS TEST INSTRUMENTS AND GRADE LEVELS)

Number of Gifted Children Identified by Each Rater (Collapsed Across Tests and Grade Levels)				Median Number of Gifted Children Identified
M*	J	EL	ER	Median
11	2	2	2	2.16
6	1	1	1	1.16
6	1	1	1	1.16
8	7	7	7	7.16
5	2	5	1	3.50
9	1	6	0	3.50
4	2	2	1	2.00
11	4	4	2	4.00
8	6	3	3	4.50
9	1	3	0	2.00
7	2	2	1	2.00
7	4	4	4	4.16
7	2	4	2	3.00
10	1	1	1	1.16
7	1	1	1	1.16
7	1	3	3	3.00
8	4	5	1	4.50
11	6	8	0	7.00
5	3	6	0	4.00
8	9	8	2	8.00

*Initials of Jury Rater.

TABLE 4

CORRELATIONS BETWEEN JURY RATERS AND GROUP MEDIAN

Rater	Mean Rating	Mean Median Rating	r	df
M*	7.70 (1.97)	3.45 (1.99)	.247	18
J	3.00 (2.30)	3.45 (1.99)	.923***	18
EL	3.80 (2.24)	3.45 (1.99)	.919***	18
ER	1.65 (1.61)	3.45 (1.99)	.404**	18

Standard deviations are in parentheses.

* Initials of Jury Rater.

** $p < .08$

*** $p < .001$

TABLE 5

ROUNDED MEAN (J*, FL, ER) NUMBERS OF GIFTED CHILDREN IDENTIFIED BY JURY RATERS ON FIVE TEST INSTRUMENTS

	INSTRUMENTS				
GRADE	DE AVILA	WISC VERBAL	WISC PERFORMANCE	TORRANCE VERBAL	TORRANCE FIGURAL
K	2	3	4	3	3
1st	1	2	1	1	5
2nd	1	2	2	1	3
3rd	7	3	4	2	6

*Initials of Jury Rater.

TABLE 6

NUMBERS OF DIFFERENT CHILDREN IDENTIFIED
AS GIFTED ON AT LEAST ONE TEST

	RATERS			
GRADE	J	EL	ER	Rounded Mean** (J, EL, ER)
K	10	11	8	7
1st	9	14	2	9
2nd	4	6	2	4
3rd	16	15	13	14
Totals	39	46	25	34

* Initials of Jury Rater.
**The numbers in this column are not based on the arithmetic means of the raters' values in Table 6, but rather are based on the rounded means in Table 5.

Community perspectives. Over five million Mexican Americans reside in the United States. Fifty percent of our Mexican Americans are 18 years old or younger--a startling indication of the high birth rate in the Chicano population. Less than seven percent of all Mexican Americans residing in the Southwest are foreign born. Less than five percent are of mixed or foreign parentage. For many the family roots extend well into the history of these states containing a unique, albeit neglected (if not rejected) historical legacy. For others the immersion into the dominant culture is recent, alienating, hostile, and costly. There is a keen sensitivity in the Mexican American of his place in the hierarchy of United States social strata, as citizen, as indigenous resident, as immigrant (Romano, 1969).

The recognition that the Office of Education would propose funding this program in an attempt to begin to identify gifted potential within the Mexican American community brought mostly surprise, initially, from the respondents within the community. Some were suspicious and refused to participate: "What do they want to know now?" Others asked, "Will this really help my children?" A few other parents immediately stated that they believed that at least one, if not all, of their own children were gifted in some way. All of the parents interviewed, it is interesting to note, had expectations for their children: "I want my children to have the things I didn't have, that I couldn't have"; "I didn't have no schooling, but my children are in school!"

Among the young people surveyed and observed, children and teenagers--in their neighborhoods, schools, hang-outs--there seemed to be little difficulty in identifying the gifted or talented peer or in talking about giftedness and talent.

When queried on, "What it means to be smart in adult daily life", people responded with comments such as:

"...finding something that makes you happy and pursuing that. If you are smart you accept some things, sacrifice, set some goals that enhance you as a human being. In today's society, they pay a premium for being super-smart." (Female, 34, Management Professional.)

"...finding some good for himself and his community." (Female, 63, third grade education.)

"...para dar valor al Mexico-Americano, asking for what is just." (Female, 47, fourth grade, educated in Mexico.)

"...speak both languages perfect." (Male, 63, fifth grade education.)

"...making rational decisions based on past experiences and current experiences." (Male, 28, Professional Administrator,)

Respect, recognition, and self-esteem are primary to the Mexican American culture. Success, status, and talent combined with these primary values color the popular portrayal of the gifted Mexican American child.

As we reviewed the data from the interviews, we realized that the Mexican Americans in our sample did not make the clear-cut distinctions between giftedness and talent found in the professional literature. Rather, the distinctions that were made centered on habits, interests, and people with whom they interacted. It may be that only the discerning parent can make an honest distinction between a child's being gifted or talented, or perhaps young children are not really differentiated along these dimensions except, perhaps, in the most obvious and stereotypic ways, e.g., dancing and singing.

It would seem, then, that to the Mexican Americans interviewed it is not sufficient to be "intelligent" to be gifted; a child must also be vivo, listo--a gifted child, in short, must have verve, style. Being able to

"make it" suggests a special type of giftedness that can survive and succeed in an educationally and socially "incompatible" (Cárdenas & Cárdenas, 1973) environment (Laosa, personal communication).

The talented child, if he has had an opportunity to discover and develop his talent, exhibits a real joy in it. He spends much of his time practicing, often to the exclusion of other activities and friends. "Ignores his friends to pursue talent." One negative result of this might be that he displays his talent so much that he is called a show off. This child receives more attention than other children because of his talent. "They stand out more. People notice their talent," but this child also seeks attention. He enjoys being the center of attention, "Sometimes he is unhappy when no one pays attention to him." It is almost as if he requires attention, that is, an audience.

The gifted child is considered to be more aware of what is going on in the world than other children his age. As one teacher put it, "Other children are wondering if (an object) is red; he's wondering how it is that men really made it to the moon." Although Chicano gifted children are believed to be proud, they are not believed to be mental show offs, ordinarily. Their manner of speaking and range of knowledge draw the attention of sensitive adults, but they shy away from being the center of attention and very frequently help other children in class or siblings at home. They exhibit a type of quiet sophistication and maturity about intellectual matters.

The talented child is considered more active than the gifted child. Perhaps this is because of the difference in their interests. Of both of them it was said, "restless, don't like to be doing just one thing." The gifted child is often seen as quiet, serious, and pensive, though this is perhaps stereotypic.

Gifted children exhibit a strong, spontaneous desire for self-improvement. "Discovers his talent and keeps going from there to get better." "Tiene pensamientos de ser grande" (Has thoughts of becoming great). "Realizes the importance of trying." They are considered to be independent and self-reliant. "Does things on his own without being told." "Uses his own judgment." Perhaps this is one of the reasons they are thought of as leaders. "Others are always looking to them before they do anything." "Always want to organize something, and others want to do what they suggest." They are not only leaders of other children but also "the first to try things." "They think of ideas and make up games that others would not do."

Gifted children use their imaginations more freely and "talk and play with more imagination." "They influence people their way, they are innovators." They create games, songs, dances, art work, and stories and therefore enjoy these self-made activities rather than those structured for them.

The gifted and talented children seem to do well in school. But it is very interesting to note that the Mexican Americans we interviewed stressed class participation, a desire to learn more, and a studious nature much more than academic grades as indicators of intelligent behavior. Thus a form of "style" is recognized as an important concomitant of talent and giftedness. These children have a need to be involved in whatever activity they happen to be pursuing at the time. "Niños que se aplican, hacen lo que les interesa. Estas personas son muy trabajadoras, no son rincondosas." (Children who apply themselves, do what interests them. They work hard; they don't fool around.) They are "bored easily, if not actively involved in something."

Both the talented and gifted children are intelligent. The talented child is one with special abilities in one or more areas. Although "intelligent" was the most frequent response given for the gifted child, most people

felt that to be considered gifted "a child must not only have intelligence, but common sense and use them both well." Both are inquisitive, always asking questions. The talented child is especially interested and eager to learn about the area or areas in which he is talented. They are "not hesitant to show interest in whatever they are good at." The gifted child is not satisfied with a simplistic answer to his questions. Very often he will want to explore alternative questions: "but what if this happened...", "what if it were like this...?" Furthermore, the gifted child "knows how to make it in the Anglo world." Gifted leadership is daring, knowledgeable, articulate, and inviting: "Can speak well, can engage others in his activities, gets everybody in it."

It was stated that gifted and talented children are talkative, especially about their interests. It is believed that teachers often do not distinguish between the sincere and enthusiastic interest and creative ideas of a gifted child, on the one hand, and another child's desire to show off. Consequently, many of these bright children are labelled trouble-makers and teachers fail to encourage their interests or deal with the challenges their ideas might hold. With another type of population, Wallach and Kogan (1965) found similar "disruptive" tendencies among certain categories of bright or creative children.

A distinction between gifted and talented may be that the gifted child initiates conversation with adults and older children and maintains their genuine attention. "They like to hang around older people and prefer them to children." He "holds his own in a conversation with grown ups." He "keeps adults interested in what he's saying." But not all of the interviewees felt gifted and talented children were talkative. Almost as many said that they were quiet. "Es el más callado de los niños." He is "quiet, does not try to attract attention." In the classroom, he might be overlooked by all but the most observant teacher.

Some gifted and talented children have lots of friends. "Amistotos, tienen buenos modos con toda la gente." (They are friendly, they are nice to everybody.) They "have many friends and are well-liked." "Everyone instantly likes him because he's so smart and clever." Others do not have many friends for a number of reasons: (1) "would not have the same interests as peers," (2) "he's mature for his age, it is often difficult for him to find friends," (3) "they like to be alone more often than other kids," or (4) "alone they can concentrate better on their talents." But this is not to say that the gifted loner is necessarily disliked.

They seem to have developed other skills of social relatability valued highly enough to be mentioned as characteristics. They are sensitive children attuned to the needs of others. "They are usually more responsible and sensitive to others around them." At home the gifted child is helpful, assuming responsibility for chores and the care of brothers and sisters. In school, they help other children with their homeowrk. They are regarded as well-behaved, obedient children, but not afraid to speak their minds. They are kind, considerate, and willing to share. They are respectful and respected by peers and adults alike.

Gifted and talented children feel vibrations of resentment from peers and adults. Very often they will not show their talent to survive among peers and adults, who might view their ability as a threat, or because they are frustrated by the obvious lack of opportunities for its development. It should be noted that the Mexican American community considers environmental influences, school facilities, opportunities for development, recognition and encouragement by teachers, family income, and parental influence to be of paramount importance for the expression and development of talent.

How is it that a child comes to be considered gifted or talented? Some of the people interviewed believe that to be "muy inteligente, viene de alto, de

Dios." (very intelligent, comes from above, from God). "Que es un don;" it is a gift from God. Other people feel that even though a person might be born with this gift or talent, without a supportive environment, training and encouragement the gift will be lost or misdirected, as in the case of some gifted gang leaders (some of whom we're happy to report, "went straight" as adults and became academic and financial leaders in their communities).

Many people feel that all children are gifted, but that many children, especially Mexican Americans, will never have an opportunity to develop to their fullest potential. The Mexican American's seeming willingness to recognize the diverse gifts of different persons, although perhaps not a popular idea among many educators of the gifted, may be a folk counterpart of Bloom's (1973) notion that if a gifted child were defined as one who scored in the top 10 percent on one or more of Thurstone's Primary Mental Abilities, then 60 percent of the nation's children would be considered gifted.

Passow (1972) recognized the need to conduct guidance and other ancillary services not only for the gifted student but also for the student's family. The debriefing which the project staff conducted for the interviewers and our own experiences in interviewing parents in the field indicated that a parental or family counseling effort seems indeed to be worthwhile. A number of parents of our potentially gifted children expressed concerns for providing adequate educational opportunities--particularly finding the needed finances for a college education--for their children.

Analyses of the Data. Multiple discriminant analysis was used to determine if the behaviors studied could adequately distinguish between gifted and normal children. Factor analysis was not attempted for a number of reasons: the sample was not random; the sample for which complete data

had been collected was small; and a factor match of the factor structure of the gifted and normal groups would have been necessary. With the small N, the factor match would probably not have been reliable or valid since the number of items exceeded the number of Subjects. Analyses of variance, however, were run separately on each item of the behavioral rating scale and the adjectival rating scale.

Multiple discriminant analyses were run on the data, using the behavior ratings and the adjective ratings as predictor variables in two separate analyses. The multiple discriminant analysis procedure may be viewed as an extension of a simple analysis of variance procedure, where instead of working with one dependent variable, the concern is with whether the groups differ on a number of dependent variables analyzed simultaneously. Essentially, such a procedure provides information concerning the extent and the manner in which two or more groups may be differentiated by a set of dependent variables operating together. In the case of the gifted project, the pupils were divided into two categories: gifted and non-gifted. The task was then to determine, via the multiple discriminant procedure, whether or not the behavior ratings and/or the adjective ratings allowed for discrimination between the two groups. When ratings on the scales were found to discriminate between the two groups, individual items in the rating scales were examined in an effort to determine which items contributed most to the discrimination.

In the discriminant analysis, an index called Wilks' lambda (Λ), is computed to provide information regarding the amount of variance accounted for by the predictor variables. The significance of lambda is tested with an F-ratio, which provides information concerning the probability that group differences as large or larger than those obtained could be produced by

drawing some number of random samples (in this case, two samples labeled "gifted" and "non-gifted") from the overall group of pupils.

The differentiation between the groups may exist along a number of dimensions or "functions," as they are called in the discriminant analysis. When only two groups are employed in the analysis, as was the case for the gifted project, only one discriminant function can be isolated. A $\underline{X}^2$ statistic is used to test the significance of each discriminant function.

All of the predictor variables (in this case, items on the behavior rating scale or the adjective rating scale) contribute to a greater or lesser extent in the discrimination obtained by each function. Item loadings on the discriminant function provide an indication of the degree to which each item contributed to the optimal discrimination obtained by that set of items.

In addition to performing the multivariate discriminant analyses, simple analyses of variance were done between the gifted and non-gifted groups, using each item of each of the two rating scales as a dependent variable separately.

Results from both the multivariate and univariate analyses are presented next.

Behavior ratings. When the behavior rating data were submitted to the multivariate discriminant analysis, a significant Wilks' lambda ($\underline{\Lambda} = .09$, $\underline{F}_{43,11} = 2.59$, $\underline{p} < .05$) was obtained, indicating that the probability was less than .05 that the gifted and non-gifted pupils had been assigned at random to their respective groups from a common student population. As was mentioned previously, two groups can only differ along one dimension in this type of analysis, and it was found that the dimension discriminated

TABLE 7

BEHAVIORAL ITEMS WHICH BEST DISCRIMINATE BETWEEN GIFTED AND NORMAL GROUPS ON THE DISCRIMINANT FUNCTION

Behavior Rating Item Number	Item Description	Loading
2	Other children always look for him/her and want to be around him/her	.35
25	Understands and remembers detailed instructions when given the first time.	.27
6	Accepts what parents tell him/her without question or without talking back when he/she is being corrected for doing something wrong.	-.26
39	Shows self-discipline in that he will not eat a snack right before a meal.	.25
21	Makes very high grades in school.	.25
16	Takes care of his/her things. When finished playing or working with something, returns it to its place.	.25
29	Uses a large vocabulary for his/her age.	.21
26	Learns things more quickly than other kids do.	.21
30	Speaks correctly, with good grammar for his/her age.	.20

to a significant extent between the gifted and non-gifted pupils ($\underline{X}^2$ = 78.25, $\underline{df}$ = 43, $\underline{p}$ < .002). Approximately 91% of the variance was accounted for by the items in the behavior rating scale.

Items were examined in terms of their loadings on the discriminant function in an effort to determine which items contributed most to the optimal discrimination between the two groups. Since no objective criterion for determining how high a loading must be in order to be significant exists, an arbitrary cutoff of a loading of .20 was established. Nine items in the behavior rating scale loaded .20 or above on the discriminant function, and these are listed on the following page, rank ordered by magnitude of loading.

All of the items but item 6 have positive loadings on the discriminant function, meaning that gifted pupils engage in the rated behaviors to a greater extent than non-gifted pupils. Item 6 is a reflection that gifted children, at least as represented by the present sample, are less inclined to accept parental rebuke without question than are non-gifted children.

Simple analyses of variance using behavior items as dependent variables revealed that the same behaviors were important in discriminating between the gifted and non-gifted groups when analyzed separately as were found when the items were considered simultaneously. Those items for which an F-ratio with a probability of less than .10 are listed in Table 8, in order of the magnitude of the probabilities. It will be seen that the items and their rank ordered importance are essentially the same as was determined in the multivariate analysis, except that fewer items were identified as important (using the arbitrary criterion of an F-ratio with a probability of .10 or less) for the univariate results.

TABLE 8

BEHAVIORAL ITEMS WHICH BEST DISCRIMINATE BETWEEN GIFTED AND NORMAL GROUPS ON UNIVARIATE ANALYSIS

Behavior Rating Item Number	F-Ratio (df = 1,53)	Probability of Obtaining F
2	6.78	.01
25	3.65	.06
6	3.53	.06
39	3.31	.07
21	3.29	.07
16	3.21	.08

The group means for all of the behavior rating items identified as important through either multivariate or univariate procedures are found in Table 9. Item means were derived from individual scores obtained on a scale from 1 to 5, with 1 representing "almost always" and 5 representing "almost never."

TABLE 9

MEAN BEHAVIOR RATINGS FOR GIFTED AND NORMAL CHILDREN ON DISCRIMINATING ITEMS

Item	Gifted $\bar{X}$	Non-Gifted $\bar{X}$
2	1.63	2.61
25	1.91	2.64
6	4.14	3.33
39	2.36	3.15
21	1.50	2.09
16	2.45	3.31
29	2.68	3.24
26	1.77	2.33
30	2.00	2.48

Adjective ratings. The multivariate discriminant analysis using the 31 adjective rating items as predictor variables yielded statistics with probabilities considerably above the .05 level (Λ = .40, $F_{31,24}$ = 1.17, p = .35 and X^2 = 36.39, df = 31, p = .24), meaning that the adjective rating items, when analyzed simultaneously, did not discriminate between the gifted and non-gifted groups to a significant extent. Since the number of pupils (N = 54) was so small in relation to the number of predictor variables (31), it is likely that the error term is inflated considerably, thus reducing the power of the test. When a larger N, significant results might have been obtained. As it was, approximately 60 percent of the variance was accounted for by items on the adjective rating scale.

Simple analysis of variance results, in which each adjective rating item was treated separately as a dependent variable, yielded 11 items with F-ratios that had corresponding probabilities of less than .10. These 11 items and the F-ratios and probabilities associated with them are rank-ordered by probability level in Table 10. The group means for the 11 adjective rating items are found in Table 11. Each item was rated on a 7-point scale, with 1 associated with the left-most adjective and 7 with the adjective on the right side of the adjective pair.

TABLE 10

ADJECTIVAL ITEMS WHICH BEST DISCRIMINATE BETWEEN GIFTED AND NORMAL GROUPS ON UNIVARIATE ANALYSIS

Item Number	Item Description	F-Ratio (df = 1,54)	Probability of obtaining F
12	Serious - Sense of humor	10.77	.002
17	Intelligent - Slow	9.47	.004
23	Not smart - Smart	4.95	.03
21	Unsure, uncertain - Confident in self	4.66	.03
4	Creative - Unoriginal, unimaginative	4.11	.04
5	Content - Ambitious	3.37	.07
28	Dishonest - Tells truth	3.35	.07
30	Dependent - Independent	3.28	.07
16	Not curious - Curious	3.21	.08
29	Good judgment - Poor judgment	3.03	.08
20	Quiet - Expressive	2.79	.097

It appears that gifted children are rated as having a better sense of humor, greater intelligence, as being "smarter," having more self-confidence, as being more creative, more ambitious, more inclined to tell the truth, more independent, more curious, as having better judgment, and being more expressive than non-gifted children.

TABLE 11

MEAN ADJECTIVE RATINGS FOR GIFTED AND NON-GIFTED CHILDREN ON DISCRIMINATING ITEMS

Item No.	Item Description	Gifted $\bar{X}$	Non-gifted $\bar{X}$
12	Serious - Sense of Humor	5.87	4.18
17	Intelligent - Slow	1.87	3.09
23	Not smart - Smart	6.13	5.24
21	Unsure, uncertain - Confident in self	5.74	4.82
4	Creative - Unoriginal, unimaginative	1.87	2.73
5	Content - Ambitious	4.52	3.36
28	Dishonest - Tells truth	6.26	5.70
30	Dependent - Independent	4.22	3.24
16	Not curious - Curious	6.65	6.03
29	Good judgment - Poor judgment	2.17	2.82
20	Quiet - Expressive	5.39	4.48

Discussion of the basic analyses. The multivariate discriminate analysis of the 43 item behavioral rating scale yielded a significant difference between the two groups. Nine items of the behavioral rating scale loaded at .20 or above on the discriminant function. Simple analysis of variance using behavior items as dependent variables proved to be important in discriminating between the gifted and non-gifted groups also. The items for which an F-ratio with a probability of less than .10 are essentially the same as those which were determined by the multivariate analysis, except that fewer items were identified as important (by an arbitrary criterion) for the univariate results.

The multivariate discriminant analysis of the 31 adjective rating items did not discriminate between the gifted and non-gifted groups to a significant degree. However, the simple analysis of variance, in which each adjective rating item was treated separately as a dependent variable, yielded 11 items with F-ratios for which the corresponding probabilities are less than .10. These 11 items do tend to discriminate between the groups.

An examination of items in terms of their loadings on the discriminant function revealed those items which contributed most to the optimal discrimination between the two groups. No objective criterion has been established for determining how high a loading must be in order to be signficant. Since this is an exploratory study, aiming to include any significant behaviors, a loading of .20 was considered to be of importance.

In the course of developing the behavioral and adjectival rating scales, the items were revised after pilot testing. Still, while interviewing the parents of the children in the sample, the project staff took note of any

statements which seemed to be too wordy, unclear, or misleading. Due to the exploratory nature of the study, it is important to remember that the wording of an item can affect an informant's response, hence the utility of the item. Had the responses been significantly altered by rephrasing of the statements, item loadings on the discriminant function or their significance on the univariate analyses may have been different.

The multivariate analysis was only significant for the behavioral rating scale; thus, only the behavioral scale had items which loaded on a discriminant function. The interesting result to note is that items dealing with grades, a large vocabulary, and good grammar did not contribute heavily to the optimal discrimination between the two groups. If similar, future studies bore this out, these might be established as differences between how educators and the Mexican American community view giftedness.

Furthermore, future studies utilizing this item generating technique, but with a larger sample of gifted and normal Subjects, could profitably use stepwise multiple discriminant analysis. Such a procedure would (1) yield only those items which contribute significantly to identification (without the necessity of having to test each item separately) and (2) present a weighting formula which would lend itself to cross-validation and, ultimately, to direct application.

CONCLUSION

As is stressed in the U. S. Office of Education's publication Education of the Gifted and Talented (1972) and throughout this report, not enough concern is given to the educational needs of gifted and talented children and, because of the scarcity of reliable identification measures, even less is given to gifted minority group children. The paucity of research on minority gifted children, especially Mexican American gifted children, has also been noted. The importance of a study of this nature, which sought to determine a community perspective on giftedness and also use observable behaviors as indicators of giftedness, is evident. It is necessary to stress, however, the exploratory nature of this study. It is the "first cut" at developing (1) a cultural-community based definition of giftedness in Mexican American children and (2) a measure for identifying Mexican American gifted children using behavioral statements.

The behavioral rating scale did differentiate between the gifted and non-gifted groups to a significant degree. In other words, parental ratings on the basis of observable behaviors alone serve to differentiate potentially gifted children. Since individual items on both the behavioral and adjectival rating scales also discriminated between the two groups, the results give an indication that the approach is worthy of further research, not only for minority groups in general but for the dominant ethnic group as well. Similar studies should be mounted in other areas of the Southwest, rural as well as urban. Such studies would reveal the differences as well as the commonalities in the perceptions of Mexican Americans on what giftedness is all about,

what kinds of behaviors reveal giftedness or potential giftedness, and what kinds of gifted behaviors are valued socially. Additions to and revisions of the rating scales would also make then usable and reliable for Mexican Americans in other parts of the country.

Although univariate and multivariate discriminant analyses were run on these data, other types of analyses could also be done. With a larger N and randomization of the sample, future researchers could do factor analyses of items in order to determine which variables define giftedness for this population. Relevant items could be combined in a manner which would weight each optimally in order to make this diagnosis more accurate. If a cross-cultural design were implemented, comparisons between or among groups would be possible, and the professions might also be able to see how close psychologically derived views of giftedness are related to the lay public. If the same or similar testing instruments were used in future research, an analysis within the gifted group should be undertaken. Those children selected for performing well on the WISC Verbal could be compared across behaviors with children selected by the other tests. Also, the use of rating scales should be expanded to include the perceptions of teachers and other community members, both adults and adolescents, and developed in a manner which would yield valid results regardless of the ethnicity of the rater.

Having administered the rating scales and worked with the resultant data, the project staff proposes at this time to (1) assemble a composite list/scale of items which might identify potentially gifted Mexican American children and (2) revise the wording of those items which presented difficulties during the data gathering phase of the project. Less than half of the items on each of the scales differentiated between the gifted

and non-gifted groups. Therefore, the staff proposes to combine the items on a shorter, more concise scale. Other items from the original scales have also been included if (1) the project staff decided that "nearly significant" items would have discriminated between the two groups had they been worded better or had the sample been larger, or (2) the items reflect an idea on giftedness and gifted behavior which was heavily stressed in the community survey but which did not show in the discriminant analyses.

The behavioral and adjectival rating scales which follow, then, consist of the items which meet the above criteria. Most of these retain their original wording, while others have been re-edited for clarity. Future experimental use of these instruments should employ several different judges (e.g., teacher and parent) in order to obtain ratings on the same traits in different settings. Also, the protocol may be profitably administered at several points in time during the early elementary years in order to monitor the behavior of children selected as potentially gifted and to identify "late bloomers."

Again it is important to underscore the idea that giftedness may refer to a whole set of characteristics or behaviors not all of which need be present in the typical behavior of any one person. Indeed, some of these attributes may seem contradictory. It is probably more accurate to say that patterns of traits are the key to understanding gifted children, although there may be some common traits in the group as well. What commonalities and patterns of differences (types of giftedness) may ultimately emerge is still an empirical question, one which may be amenable to cross-cultural investigation.